

CLAIMS

We claim:

1. A blow-molded container having a central axis and made of a polymer comprising:
 - a body having a sidewall, adjacent the sidewall a shoulder and a bottom, adjacent the shoulder a neck, adjacent the neck a finish providing an opening to the container;
 - wherein, said sidewall has a pair of inwardly facing grip recesses spaced about its periphery;
 - each of said grip recesses being defined by a top wall and a bottom wall and a first sidewall and a second sidewall extending between the top wall and the bottom wall;
 - wherein said first sidewall and said second sidewall converge to form an inward ridge; and
 - wherein said first sidewall has a surface with a generally convex appearance having a cross-sectional curvature and said second sidewall has a surface with a generally convex appearance having a cross-sectional curvature different from said first sidewall.
2. A blow-molded container according to claim 1, wherein said first sidewall of each said grip recess has a grip pattern.
3. A blow-molded container according to claim 2, wherein said grip pattern is a plurality of longitudinal grooves.
4. A blow-molded container according to claim 1, wherein said inward ridge has a cross-sectional radius that smoothly blends with said curvature of

said first sidewall and said curvature of said second sidewall.

5. A blow-molded container according to claim 4, wherein said radius of said inward ridge and said curvature of said first sidewall have a first common tangent and said radius of said inward ridge and said curvature of said second sidewall have a second common tangent and a first imaginary line through said first common tangent and a second imaginary line through said second common tangent converge with an acute angle less than 90° .
6. A blow-molded container according to claim 5, wherein said acute angle is at most 80° .
7. A blow-molded container according to claim 5, wherein said acute angle is at most 40° .
8. A blow-molded container according to claim 4, wherein said cross-sectional radius is about 0.05 inch to about 0.18 inch.
9. A blow-molded container according to claim 1, wherein said second sidewall of each grip recess of said pair of inwardly facing grip recesses have an offset from said central axis.
10. A blow-molded container according to claim 9, wherein said offset is more than 0.06 inch.
11. A blow-molded container according to claim 1, wherein each grip recess of said pair of inwardly facing grip recesses has an inward depression of about 0.50 inch to about 1.25 inches.
12. A blow-molded container according to claim 11, wherein said inward depression is about 0.75 inch to about 1.0 inch.
13. A blow-molded container according to claim 1, wherein said curvature of

said first sidewall has a general radius greater than a general radius of said curvature of said second sidewall.

14 A blow-molded container according to claim 2, wherein said grip pattern generally provides an overall convex curvature appearance.

15. A blow-molded container having a central axis and made of a polymer comprising:

a body having a sidewall, adjacent the sidewall a shoulder and a bottom, adjacent the shoulder a neck, adjacent the neck a finish providing an opening to the container;

wherein, said sidewall has a pair of inwardly facing grip recesses spaced about its periphery;

each of said grip recesses being defined by a top wall and a bottom wall and a first sidewall and a second sidewall extending between the top wall and the bottom wall;

wherein said first sidewall and said second sidewall converge to form an inward ridge and the inward ridge has a cross-sectional radius that smoothly blends with the first sidewall and with the second sidewall;

wherein said first sidewall has a surface with a generally convex appearance having a cross-sectional curvature and said second sidewall has a surface with a generally convex appearance having a cross-sectional curvature different from said first sidewall; and

wherein said radius of said inward ridge and said curvature of said first sidewall have a first common tangent and said radius and said curvature of said second sidewall have a second common tangent and a

first imaginary line through said first common tangent and a second imaginary line through said second common tangent converge with an acute angle.

- 16 A blow-molded container according to claim 15, wherein said acute angle is at most 80°.
17. A blow-molded container according to claim 15, wherein said grip recess has a pronounced inward ridge having an acute angle at most 40°.
18. A blow-molded container according to claim 15, wherein said second sidewall of each grip recess of said pair of inwardly facing grip recesses have an offset from the central axis of more than 0.06 inch.
19. A blow-molded container according to claim 15, wherein said top wall of each of said grip recesses is adjacent to the container shoulder and said first sidewall and said second side wall extend from the top wall to said bottom wall, and said bottom wall is adjacent to said container bottom.
- 20 A blow-molded container having a central axis and made of a polymer comprising:

a body having a sidewall, adjacent the sidewall a shoulder and a bottom, adjacent the shoulder a neck, adjacent the neck a finish providing an opening to the container;

wherein, said sidewall has a pair of inwardly facing grip recesses spaced about its periphery;

each of said grip recesses being defined by a top wall and a bottom wall and a first sidewall and a second sidewall extending between the top wall and the bottom wall;

wherein said first sidewall and said second sidewall converge to form an inward ridge and the inward ridge has a cross-sectional radius that smoothly blends with the first sidewall and with the second sidewall;

wherein said first sidewall has a surface with a generally convex appearance having a cross-sectional curvature and said second sidewall has a surface with a generally convex appearance having a cross-sectional curvature different from said first sidewall;

wherein said radius of said inward ridge and said curvature of said first sidewall have a first common tangent and said radius and said curvature of said second sidewall have a second common tangent and a first imaginary line through said first common tangent and a second imaginary line through said second common tangent converge with an acute angle; and

wherein said second sidewall of each of the grip recesses has an offset from the central axis.